# Pongo pygmaeus

# Orangutan

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# **Taxonomy**

Scientific Names: Pongo pygmaeus, Pongo abelii

English Names: Bornean Orangutan, Sumatran Orangutan

Noms Français: l'orang-outan de Bornéo, l'orang-outan de Sumatra

Malayian Name: Orang Utan (meaning 'man of the woods')

Orangutans are the only great apes occurring outside Africa, and live in declining forest habitats on the islands of Borneo and Sumatra (see Figure 1). Fossil material indicates that orangutans were formerly widespread in continental southeast Asia. All populations had until recently been regarded as the single species (*Pongo pygmaeus*). But analysis of mitochondrial DNA in 1996 suggested that the genetic divergence between orangutans from Borneo and Sumatra justifies two separate species: the Bornean Orangutan *Pongo pygmaeus* and the Sumatran Orangutan *P. abelii*. The first species is often separated into three subspecies: *P. p. pygmaeus*, *P. p. wurmbii* and *P. p. morio* but status needs further revision.

### Distribution

The Bornean Orangutan occurs in forests in at least two of the three nations sharing the island: Indonesia (Kalimantan) and Malaysia (Sabah, Sarawak). Its presence in Brunei is unconfirmed. The Sumatran Orangutan occurs only in the provinces of Aceh and Sumatera Utara in northern Sumatra, Indonesia. For further details see Figure 1.

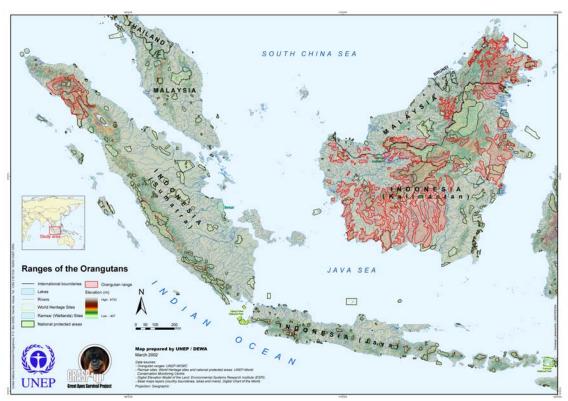


Figure 1: Distribution of Orangutan. Source: UNEP.

# Anatomy and Appearance

Orangutans have a large, bulky body, a thick neck, very long, strong arms, short, bowed legs, and like all great apes no tail. They are covered with long reddish-brown hair except for their faces. The orangutan has a large head with a prominent mouth area. Adult males have large cheek flaps that grow with age. The largest males have an arm span of about 2.3 m.

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# Size, Weight and Lifespan

Males: max. 90 kg 100-140 cm Females: 50 kg 80-110 cm

Lifespan: 56 years in captivity, 30-45 years in the wild.

#### Gestation

8.5-9 months. Reproduction starts in the age of 7-10 years. Young orangutans are weaned from their mothers at about 6-7 years of age. The slow reproduction of orangutans is one major threat to the population because the slow reproduction prevents the population to gain large size in a short time.

### **Predators and Natural Enemies**

Tigers and python for juveniles; for adults only humans are known as sever enemies.

#### Habitat

Tropical rainforests of Borneo and Sumatra of the Malayan Archipelago.

# **Ecology and Behavior**

Orangutans are omnivorous but mostly herbivorous. They eat fruit (mangos, figs, litschi-plums), leaves, seeds, tree bark, plant bulbs, tender plant shoots, and flowers. They also eat insects and animals like small birds and mammals. Orangutans don't leave their tree branches to drink, because they drink water that has collected in the holes between tree branches. Orangutans are diurnal, shy, and solitary animals in contrast to the African great ape relatives, which are socially organized. They live alone in large territories (10-40 km²). The only long-lasting orangutan social group is the mother and offspring, who live together for about 7 years. When mating, the male and female orangutan stay together for only a few days. Each evening, orangutans construct a "nest" out of leaves and branches for the night. A mother and her nursing offspring share nests.

### **Population Sizes**

As with other forest animals, it is difficult to assess orangutan population size and monitor trends due to the remoteness and inaccessibility of the forests. In the late 1980s the total population was tentatively estimated at approaching 180,000. In 1990, the IUCN/SSC Primate Specialist Group estimated that there were approximately 30,000 to 50,000 orangutans remaining in the wild, but cautioned that these figures may have been over-estimates.

*Pongo pygmaeus*: The 1993 Population and Habitat Viability Analysis (PHVA) concluded that only 10,200-15,500 orangutans remained in Borneo, but this lacked data on some populations, and was before the forest fires and illegal logging of recent years. Estimates for the three sub-species *P. p. pygmaeus*, *P. p. wurmbii* and *P. p. morio* are revised.

*Pongo abelii*: Latest estimate in late 2002 is about 3,500 and declining (Wich et al. 2003), down from an estimate in 1997 of 12,770 (Rijksen and Meijaard 1999).

# **Population Trends**

A Population and Habitat Viability Analysis (PHVA) Workshop in 1993 also published estimates of distribution area and population size. Most Sumatran Orangutans, then estimated to number 9,200 in total, occur in Gunung Leuser National Park a protected area  $9,460~\rm km^2$  in area with suitable orangutan habitat fragmented by a region of human settlement and agriculture: the western population was thought to number around  $3,450~\rm in$  an area of about  $5,500~\rm km^2$ , and the eastern population around  $2,400~\rm in$   $3,000~\rm km^2$ . By 2000, the estimated total was down to  $6,000~\rm and$  thought to be falling at  $1,000~\rm individuals$  per year (van Schaik et al. 2000).

The available area of orangutan habitat in Borneo was calculated by the PHVA workshop to extend over more than 24,000 km², with a possible total orangutan population of between 12,500 and 20,500 individuals. The Bornean Orangutans, located mostly in Kalimantan (Borneo, Indonesia) are more than the Sumatran Orangutans. The Bornean Orangutan is known to inhabit two major protected areas in

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Kalimantan: Tanjung Puting National Park (a World Heritage Site dedicated by UNESCO) and Kutai NP. Both of which have been illegally logged in recent years and logging is still going on – recent estimates indicate that almost all primary forests will vanish within five to ten years. Recent estimates fear the Tanjung Puting population may be as low as 500, down from 2,000 in 1994 (EIA 2000).

In Sarawak, the range had been reduced by 1980 to two main sub-population: the forests between the rivers Sadong and Lupar, and the Lanjak-Entimau Wildlife Sanctuary (created in 1983 to conserve orangutans). The orangutan is still relatively widespread in Sabah, and occurs in the Danum Valley Conservation Area, Malua-Pin, the Sepilok Forest Reserve and the Kulamba Wildlife Reserve. However, the range is fragmented and the species becomes increasingly scarce at high altitudes.

Severe forest fires in Indonesia during the late 1990s occurred in parts of south, southwest and central Kalimantan known to be important for orangutans, and it is believed that orangutan have very limited prospects for escape and subsequent survival. There is uncertainty about all these estimates, but the scarce information suggests that serious population decline has occurred in Borneo, possibly by up to 50% since the early 1990s.

# Threats to the Populations

Habitat loss through forest fires and human activities.

#### Conservation

The small population size and further steadily declining population qualifies the orangutan as critically endangered.

Loss of suitable forest habitat is by far the greatest threat to orangutans, caused by commercial logging, by forest conversion to agriculture (including cash crops, the Rice Bowl Project and subsistence farming) and by forest fires. Extensive tracts of forest have been cleared throughout orangutan range. Whilst timber extraction in Indonesia in previous years had been widely regarded as continuing beyond sustainable levels, illegal logging has become particularly serious following a reduction in central administrative control in the post-Suharto era, and is having a major impact on habitats in protected areas.

The Species Survival Commission of the World Conservation Union (IUCN) has adopted the new taxonomy in which two species are recognized, and categorized the Sumatran Orangutan as **Critically Endangered** in 2000, i.e. facing an extremely high risk of extinction in the wild in the immediate future. The Bornean Orangutan was categorized as **Endangered** overall, i.e. facing a very high risk of extinction in the wild in the near future. The recognized subspecies on Borneo are also individually categorized as **Endangered**.

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#### Further sources on the Internet

Enchanted Learning (http://www.enchantedlearning.com/subjects/apes/)

UNEP – World Conservation Monitoring Centre (<a href="http://www.unep-wcmc.org/">http://www.unep-wcmc.org/</a>)

Primate Info Net – PIN (www.primate.wisc.edu/pin/)

In German: VOX (http://www.vox.de/28500)